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THE NEW NATATORIUM

By W. D. SHEETS, Ch. E.4

With the arrival of the lowly Freshman this fall, comes also a new addition to the campus in the form of the men's natatorium, a thing of beauty, long dreamed of, long desired, and at last realized, to be completed by the opening of school this fall. Immediately, with a loud splash, an extensive program will be launched to include Varsity and intramural competition, and regular classes for beginners and advanced students.

Swimming was officially inaugurated as a regular Varsity sport this last season, and, under the direction of "Mike" Peppe, passed with flying colors. Due to the lack of proper facilities, but few of the Big Ten schools were scheduled; hence the coming season will see the opening of active Big Ten competition in this sport.

All students who enter the University as non-swimmers will be required to elect swimming as a part of the physical education requirement. One hundred per cent swimmers in the University will be the aim of the Department of Swimming, as there will now be pools for both men and women.

The natatorium will be finished in red brick and trimmed with cut stone. The main entrance will be at the north end with another convenient entrance on the east side. An enclosed passage connects the natatorium to the new gymnasium on the west, for the use of students passing back and forth between the two buildings.

The building proper will contain offices and dressing rooms for students, visiting teams, and officials. Individual lockers are to be used and adequate shower facilities will be installed. Last but not least, there are to be three pools: a Varsity pool, a general pool, and a beginner's pool.

The Varsity pool, 75 feet long by 40 feet wide and varying from 7 feet to 12 feet deep, will be equipped with a standard 10-foot board flanked by a regulation low-board on each side. The pool is to be lined with white tile with suitable markings and will have an underwater lighting system as a unique feature. Along both sides and at one end will be situated 1500 permanent seats for spectators.

The general pool, 75 feet long by 35 feet wide, and varying from 4 feet to 9 feet in depth, will be equipped with three regulation low-boards, and is to be used for general and instructional purposes.

The beginners' pool, separated from the general pool by a heavy lifting door to permit the undisturbed teaching of classes, will be 30 feet by 20 feet, varying from 3 feet to 4 feet in depth.

Regarding the use of these three pools by the students, the O. S. U. Athletic Association bulletin of May 10 states: "The presence of these three pools, each a different type, assures a varied and complete swimming program for Ohio State University students. Except for the time when used for instructional and team practice periods, these pools will remain open, under supervision, for the balance of the general student body."

Needless to say, with such a continuous use of the pools, there will be required a large purifica-

tion plant. A plant has been planned such that the water will be pure enough to drink when it leaves the system to go back into the pool. The installation has been approved by the State Department of Health and insures all precautions for the health and comfort of the swimmers.

The purification system is to be used in connection with an automatic heating system for the purpose of maintaining conditions most comfortable to the body of a swimmer. Tests of the temperature may be taken at will, and to control the purification system two testing sets are used. One, an International Alkalinity Testing Set, will be used for the purpose of ascertaining the alkalinity of the water in the pool. The other, an International Orthotolidin Testing Set, will be used to determine the presence of bacteria of a harmful nature in the water. These sets are in reality only of an extra precautionary nature and are operated by hand at the desire of those in charge of the pool, tests being run to check the purification apparatus.

The purification apparatus is operated continuously, without changing the level in the pools. The water, on its exit from the pools, passes into hair and lint catchers, which remove all material of this type, to prevent clogging of the pumps. These catchers are cleaned by hand at regular intervals without interrupting the system.

The water then passes through the pumps, flow indicators showing the amount of water, and automatic proportioners regulating the flow in such a way that if one pool is cut out of the system the same flow is maintained in the other pools without change.

The water next passes to the two automatic pressure feeders where alum and sal-soda are fed to the water to precipitate all dissolved solids and to maintain the proper alkalinity. The feeders are adjusted from data obtained in the tests made with the testing set mentioned above, and then are automatic.

The solids precipitated out are removed from the water by filtering, four International Style "R" Vertical Pressure Filters being used. Each filter is 108 inches in diameter and 7 feet and 9 inches high. They are cleaned by backwashing with purified water into the sewer.

From the filters the water goes to the automatic heaters, three Croll-Reynolds Instantaneous Steam Operated Swimming Pool Heaters being used. These heaters, when supplied with steam under one pound pressure, are capable of raising the temperature of the water from 40 to 80 degrees Fahrenheit.

From the heaters, the water, for the purpose of killing all bacteria, is given chlorine treatment. Two automatic Wallace and Tiernan Type MSPM chlorinators are used, adjustment being made by means of the Orthotolidin Testing Set determinations. They then require attention only when the chlorine cylinders are exhausted.

The system will treat 370,000 gallons of water

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every eight hours and this amount of water if discharged into the pools directly would cause strong currents to form, but through the use of a series of baffle plates no current having detrimental effects is permitted to arise.

With such precautions and conveniences the natatorium promises to be one of the best in the country. It is to be thoroughly tested and put into operation before being ready for use, as a check on the performance of the various units.

Swimming is a clean, healthful sport which promises to become increasingly interesting during the long winter months. And the nearness of the natatorium to the campus promises to draw quite an attendance at the meets. With Chicago as the opponent for the dedication exercises and the Big Ten meet to be held here next spring, there are bound to be some new records chalked up for all to read. Don't miss that!

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